REQUEST FOR MODIFICATION OF NPSPAC AUTHORIZATION

Background

The City of Richardson is currently authorized for nine channels in the 800 MHz NPSPAC band per FCC call signs WNVR825 and WQEE937 and operates a Harris EDACS analog trunking radio system. Richardson is in the process of replacing the existing system with an 8-channel, 4-site simulcast P25 system.

The original EDACS radio infrastructure was designed to support mobile radio operations. Due to the increased use of portable radios, annexation of property, construction of dense building structures, in-building coverage requirements, and interoperability communications requirements, the current single-site system is no longer capable of supporting the coverage requirements of the system users.

The City, its consultant, and its radio vendor have developed a four-site simulcast design to replace the existing system. The sites will utilize relatively low antenna heights, down-tilt antenna patterns, and low transmit ERP. The system design is optimized for in-building radio coverage throughout the City of Richardson. The proposed system will utilize the P25 trunking protocol and will be made available to neighboring agencies to support mutual aid and interoperable communications. Furthermore, the system will include ISSI capabilities for connection to other ISSI-capable systems and will provide 800 MHz coverage to authorized ISSI users.

The system upgrade has been fully funded by the City of Richardson and the infrastructure vendor is under contract. Infrastructure installation is scheduled to begin in June of 2011 with the system fully operational by October 1, 2011.

Service Area

The City of Richardson is requesting an extended service area to support mutual aid and joint response. The Richardson Fire Department and Police Department routinely respond to emergency calls in the cities of Garland, Plano, University Park, Dallas, and Addison as well as University of Texas at Dallas and Dallas Area Rapid Transit facilities. Therefore, the City of Richardson considers all locations within six miles of their city boundary as part of the mutual aid response area for City of Richardson first responders. As stated above, the City of Richardson will make the 800 MHz P25 system available to other agencies through interlocal agreements. The City of Richardson will also deploy ISSI

connections to other ISSI-capable systems per interlocal agreements and coordination with NCTCOG.

Exhibit 1 depicts the Richardson city boundary and the proposed mutual aid service area (six miles outside of the City of Richardson).

Base Station Data

The base station data used for the proposed City of Richardson radio sites are based upon the infrastructure vendor's proposed design and is reflected on the associated FCC Form 601 application for modification. FCC records were utilized for any relevant co-channel or adjacent channel stations referenced herein.

Contour Calculations

All field strength calculations utilized the field strength charts of FCC Report R-6602 with a -9 dB antenna correction factor. The calculations utilized antenna heights above average terrain (HAAT) values derived from the National Geophysical Data Center 1 Arc-Second Point Elevation Data.

Service Area Contours

The predicted service contours of the proposed stations were set at 41 dBu field strength per the Region 40 plan. Exhibit 2 depicts the service contours for the proposed City of Richardson sites.

Co-Channel Stations

FCC records were searched and it was determined that no co-channel stations exist within 150 miles of Richardson's proposed locations. Therefore, no co-channel contour analysis is provided herein.

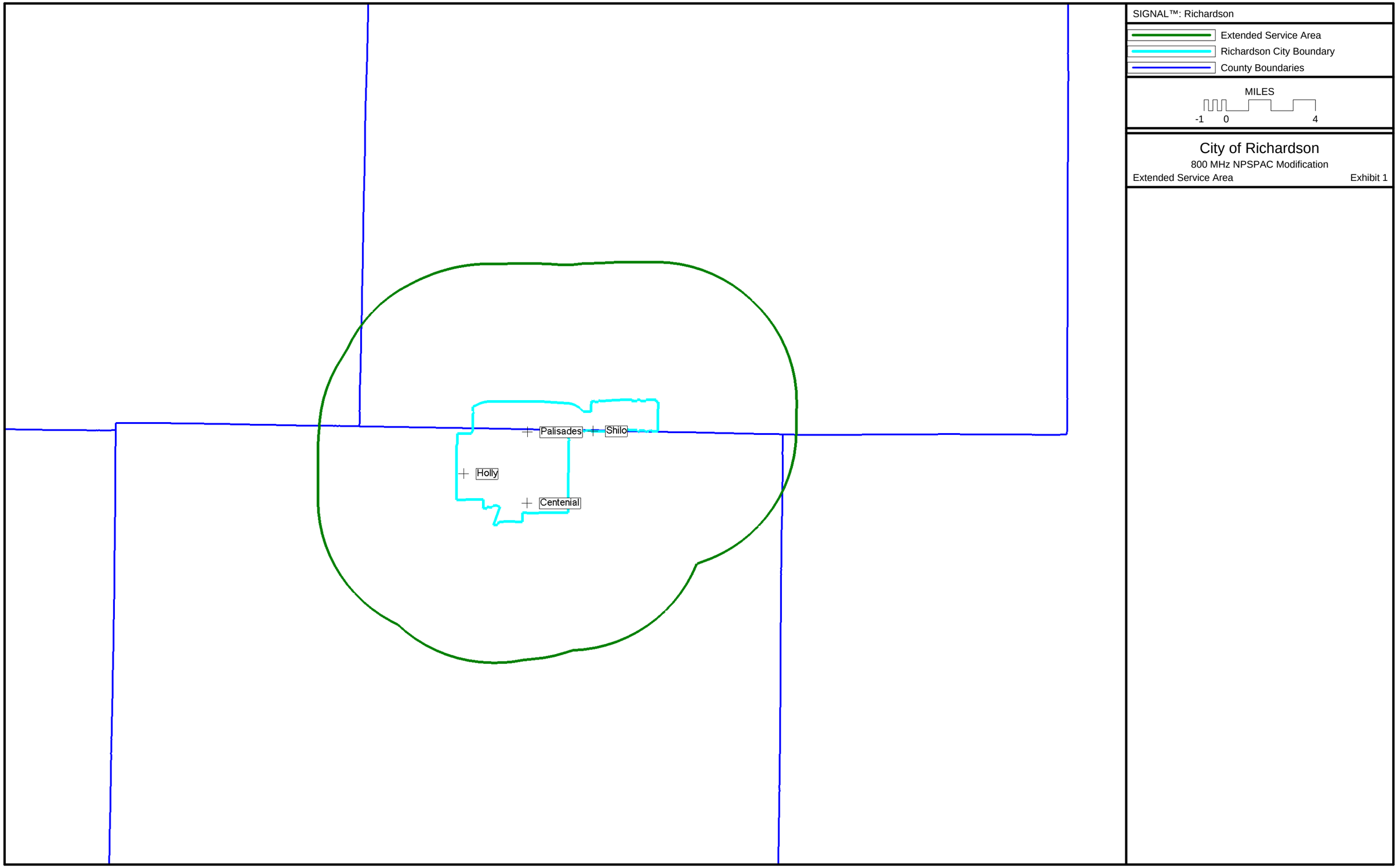
Adjacent Channel Stations

FCC records were further searched to locate adjacent channel stations. All adjacent channels stations within 100 miles of the City of Richardson are licensed to the City of Fort Worth (WNXE704). Per the Region 40 plan, the proposed 26 dBu interference contours of the City of Richardson were examined in relation to the 41 dBu service contours of the City of Fort Worth. As depicted in

Exhibit 3, contour overlap with Location 3 (Euless, Texas) of the City of Fort Worth is present. However, all such overlap occurs outside of the City of Fort Worth and outside of Tarrant County. It should also be noted that the 26 dBu interference contour of Fort Worth's Location 3 extends into the city limits of Richardson. However, these stations currently co-exist without mutual interference. Therefore, the City of Richardson believes that this incidental overlap of contours will not result in future interference conditions. If future interference between Fort Worth and Richardson is discovered, Richardson will work with Fort Worth to resolve such interference conditions.

List of Engineering Exhibits

Exhibit 1 Proposed City of Richardson Extended Service Area
Exhibit 2 Proposed City of Richardson 41 dBu Service Contours
Exhibit 3 Adjacent Channel Contours



SIGNAL™: Richardson

Extended Service Area

Richardson City Boundary

County Boundaries

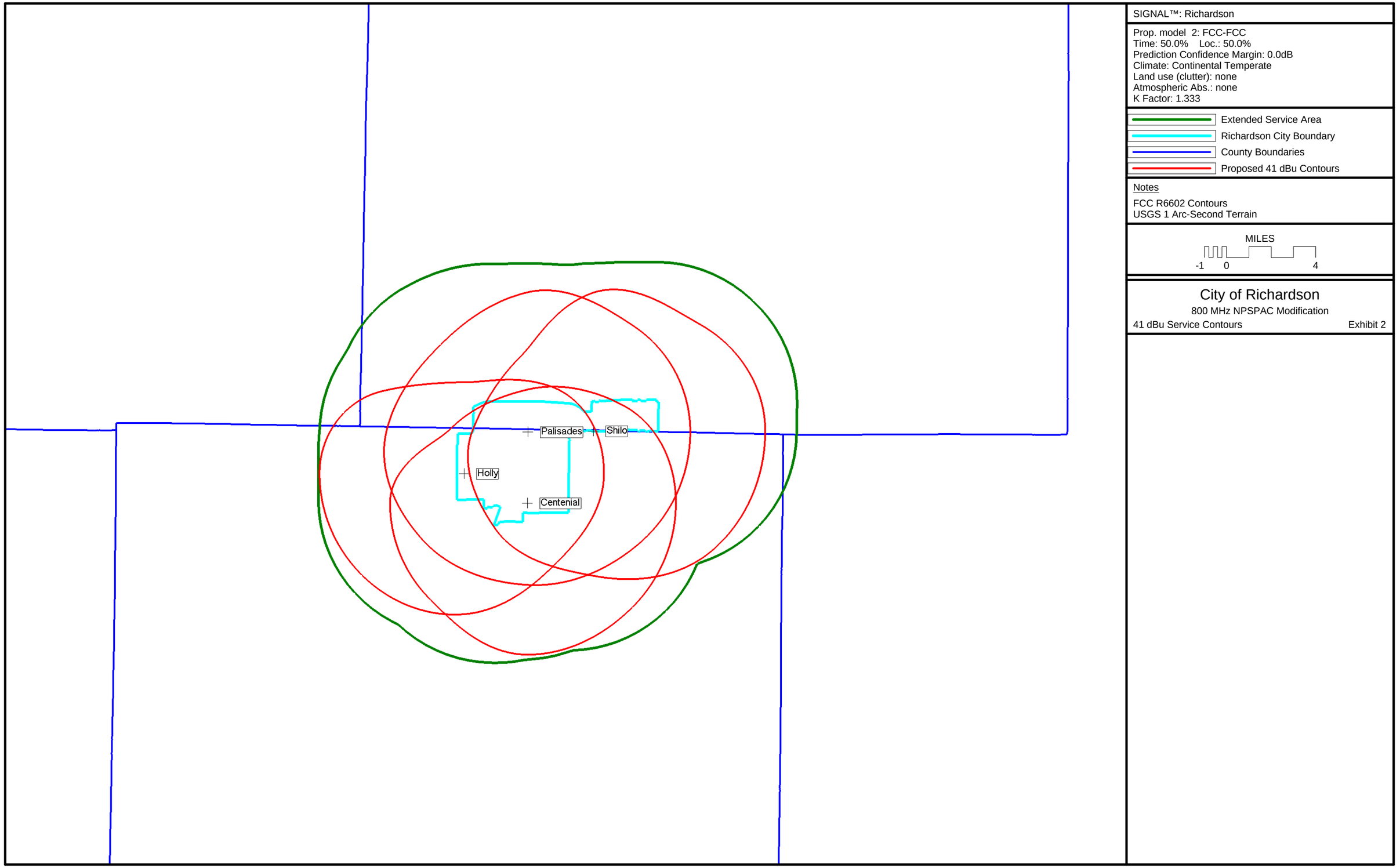
MILES

-1 0 4

City of Richardson

800 MHz NPSPAC Modification

Extended Service Area Exhibit 1



SIGNAL™: Richardson

Prop. model 2: FCC-FCC
Time: 50.0% Loc.: 50.0%
Prediction Confidence Margin: 0.0dB
Climate: Continental Temperate
Land use (clutter): none
Atmospheric Abs.: none
K Factor: 1.333

Extended Service Area
Richardson City Boundary
County Boundaries
Proposed 41 dBu Contours

Notes

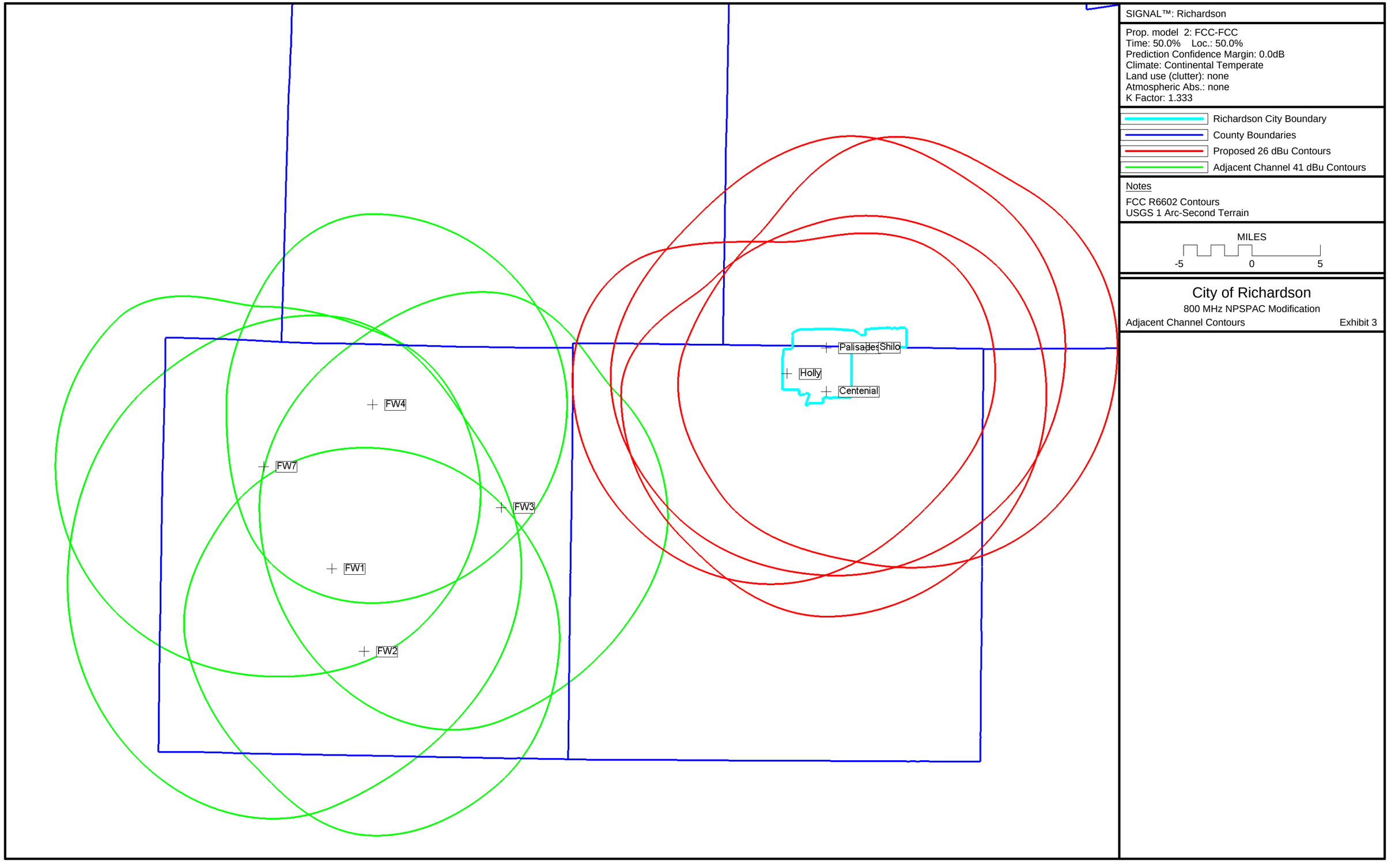
FCC R6602 Contours
USGS 1 Arc-Second Terrain

MILES
-1 0 4

City of Richardson

800 MHz NPSPAC Modification

41 dBu Service Contours Exhibit 2



SIGNAL™: Richardson

Prop. model 2: FCC-FCC
Time: 50.0% Loc.: 50.0%
Prediction Confidence Margin: 0.0dB
Climate: Continental Temperate
Land use (clutter): none
Atmospheric Abs.: none
K Factor: 1.333

Richardson City Boundary
County Boundaries
Proposed 26 dBu Contours
Adjacent Channel 41 dBu Contours

Notes

FCC R6602 Contours
USGS 1 Arc-Second Terrain

MILES
-5 0 5

City of Richardson

800 MHz NPSPAC Modification

Adjacent Channel Contours Exhibit 3